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**REMARKS**

The Office action dated September 23, 2004 and the cited references have been carefully considered.

**Status of the Claims**

Claims 1-55 are pending.

Claims 3-7, 13, 15, 32-36, 42, 44, and 51-55 are withdrawn.

Claims 1, 2, 8-12, 22, 28, 31, and 37-41 are rejected under 35 U.S.C. § 102(b) as being anticipated by Laskaris et al. (US Patent 6,150,819 hereinafter "Laskaris"). Claims 17, 20-21, 23-27, 46, and 48-50 are rejected under 35 U.S.C. § 102(b) as anticipated by Laskaris or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Laskaris. Claims 2, 16, 29-30, and 45 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Laskaris in view of Albert (US Patent 2,875,114). Claims 14, 18-19, 43 and 47 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Laskaris in view of Kaufman et al. (US Patent 5,317,297; hereinafter "Kaufman"). Claims 14, 18-19, 43 and 47 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Laskaris in view of Nishihara et al. (US Patent 4,808,659; hereinafter "Nishihara"). The Applicants respectfully traverse all of these rejections for the reasons set forth below.

**Remarks on Amendments to the Claims**

Claims 1, 22, 23, and 28 are amended to recite a range of aluminum content from about 8 weight percent to about 17 weight percent. Support for this limitation is found in the original specification as filed; for example, in paragraph 18, and Tables 2 and 3.

**Claim Rejection Under 35 U.S.C. § 102(b)**

Claims 1, 2, 8-12, 22, 28, 31, and 37-41 are rejected under 35 U.S.C. § 102(b) as being anticipated by Laskaris. Claim 2 is canceled. Therefore, the rejection of claim 2 is now moot. The Applicants respectfully traverse the rejection of claims 1, 8-12, 22, 28, 31, and 37-41 because Laskaris does not disclose each and every element of each of these claims.

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"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a *single* prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). "The identical invention must be shown in as complete detail as is contained in the . . . claim." *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989).

Laskaris mentions only generally that a "metal [for pole pieces] may comprise steel, iron, . . . , aluminum steel or iron, . . . ." Column 8, lines 12-16. Laskaris does not disclose any specific composition for the metal.

In contradistinction, each of claims 1, 8-12, 22, 28, 31, and 37-41 recites an alloy comprising iron and aluminum, wherein the aluminum content of the alloy is in the range from about 8 weight percent to about 17 weight percent. Laskaris does not disclose this range of aluminum content. Thus, Laskaris does not disclose each and every element of each of claims 1, 8-12, 22, 28, 31, and 37-41.

Since Laskaris does not disclose each and every element of each of claims 1, 8-12, 22, 28, 31, and 37-41, Laskaris does not anticipate these claims.

Claims 17, 20-21, 23-27, 46, and 48-50 are rejected under 35 U.S.C. § 102(b) as anticipated by Laskaris. The Applicants respectfully traverse this rejection because Laskaris does not disclose each and every element of each of claims 17, 20-21, 23-27, 46, and 48-50.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a *single* prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). "The identical invention must be shown in as complete detail as is contained in the . . . claim." *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989).

As pointed out above, Laskaris does not disclose the aluminum content range from about 8 weight percent to about 17 weight percent. Therefore, Laskaris does not disclose each and every element of each of claims 17, 20-21, 23-27, 46, and 48-50.

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Since Laskaris does not disclose each and every element of each of claims 17, 20-21, 23-27, 46, and 48-50, Laskaris does not anticipate these claims.

**Claim Rejection Under 35 U.S.C. § 103(a)**

Claims 17, 20-21, 23-27, 46, and 48-50 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Laskaris. The Applicants respectfully traverse this rejection because Laskaris does not teach or suggest all of the limitations of each of claims 17, 20-21, 23-27, 46, and 48-50.

"To establish *prima facie* obviousness of a claimed invention, all the limitations must be taught or suggested by the prior art." M.P.E.P. § 2143.03 (8<sup>th</sup> ed., Rev. 2, May 2004).

As pointed out above, Laskaris discloses only generally an aluminum steel or iron. Nowhere does Laskaris teach or suggest a specific aluminum content.

In contradistinction, claims 17, 20-21, 23-27, 46, and 48-50 recite an aluminum content range from about 8 weight percent to about 17 weight percent. Therefore, Laskaris does not teach or suggest all of the limitations of each of claims 17, 20-21, 23-27, 46, and 48-50.

Since Laskaris does not teach or suggest all of the limitations of each of claims 17, 20-21, 23-27, 46, and 48-50, Laskaris does not render these claims obvious.

Claims 2, 16, 29-30, and 45 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Laskaris in view of Albert. Claims 2 and 29-30 are canceled. Therefore, the rejection of these claims is now moot. The Applicants respectfully traverse the rejection of claims 16 and 45 because a combination of Laskaris and Albert does not teach or suggest all of the limitation of each of these claims.

As pointed out above, Laskaris discloses only generally an aluminum steel or iron. Nowhere does Laskaris teach or suggest a specific aluminum content. Albert discloses iron-aluminum alloys with aluminum only in the range from about 3 to 7 weight percent. Column 3, lines 7-9; and Examples I and III. Nowhere does Albert teach or suggest an alloy with an aluminum content outside 3-7 weight percent.

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In contradistinction, each of claims 16 and 45 recites an aluminum content in the range from about 8 weight percent to about 17 weight percent. Moreover, the Applicants unexpectedly discovered that alloys having an aluminum content of 8 weight percent or higher have good properties such as core losses and eddy current losses. See; e.g., Table 3.

Since a combination of Laskaris and Albert does not teach or suggest all of the limitations of each of claims 16 and 45, these claims are patentable over Laskaris in view of Albert.

Claims 14, 18-19, 43 and 47 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Laskaris in view of Kaufman. The Applicants respectfully traverse this rejection because a combination of Laskaris and Kaufman does not teach or suggest all of the limitations of each of claims 14, 18-19, 43 and 47.

"To establish *prima facie* obviousness of a claimed invention, all the limitations must be taught or suggested by the prior art." M.P.E.P. § 2143.03 (8<sup>th</sup> ed., Rev. 2, May 2004).

As pointed out above, Laskaris discloses only generally an aluminum steel or iron. Nowhere does Laskaris teach or suggest a specific aluminum content. Therefore, adding Kaufman to show the use of an epoxy insulating adhesive still does not teach or suggest all of the limitations of each of claims 14, 18-19, 43 and 47.

Since a combination of Laskaris and Kaufman does not teach or suggest all of the limitations of each of claims 14, 18-19, 43 and 47, these claims are patentable over Laskaris in view of Kaufman.

Claims 14, 18-19, 43 and 47 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Laskaris in view of Nishihara. The Applicants respectfully traverse this rejection because a combination of Laskaris and Nishihara does not teach or suggest all of the limitations of each of claims 14, 18-19, 43 and 47.

"To establish *prima facie* obviousness of a claimed invention, all the limitations must be taught or suggested by the prior art." M.P.E.P. § 2143.03 (8<sup>th</sup> ed., Rev. 2, May 2004).

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As pointed out above, Laskaris discloses only generally an aluminum steel or iron. Nowhere does Laskaris teach or suggest a specific aluminum content. Therefore, adding Nishihara to show the use of a polycarbosilane adhesive still does not teach or suggest all of the limitations of each of claims 14, 18-19, 43 and 47.

Since a combination of Laskaris and Nishihara does not teach or suggest all of the limitations of each of claims 14, 18-19, 43 and 47, these claims are patentable over Laskaris in view of Nishihara.

In view of the above, it is submitted that the claims are patentable and in condition for allowance. Reconsideration of the rejection is requested. Allowance of claims at an early date is solicited.

Respectfully submitted,



Toan P. Vo, Ph.D.  
Attorney for the Applicants  
Registration No. 43,225  
(518)387-6648

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